

09/380,773

#20

(FILE 'HOME' ENTERED AT 12:59:20 ON 24 JAN 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, AGRICOLA' ENTERED AT 12:59:25 ON 24 JAN 2003

L1 39474 S PHA OR POLYHYDROXYALKANOATE OR POLYHYDROXYALKANOIC  
L2 211 S L1 AND TRANSFERASE  
L3 124 DUP REM L2 (87 DUPLICATES REMOVED)  
L4 32 S L3 AND COA  
L5 2 S L4 AND CO-EXPRESSION  
L6 31 S L1 AND (COA (2N)TRANSFERASE)  
L7 23 DUP REM L6 (8 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 13:19:27 ON 24 JAN 2003

L8 0 S SINGLE (2N) PROMOTER

FILE 'MEDLINE, CAPLUS, BIOSIS, AGRICOLA' ENTERED AT 13:32:18 ON 24 JAN 2003

L9 2086 S SINGLE (2N) PROMOTER  
L10 1296 S L9 AND EXPRESSION  
L11 153 S L9 (5N) (CO-EXPRESSION OR EXPRESSION)  
L12 3 S L9 (5N) (CO-EXPRESSION OR COEXPRESSION)  
L13 1 DUP REM L12 (2 DUPLICATES REMOVED)  
L14 14134 S CLONING AND MULTIPLE AND GENE  
L15 42 S L14 AND (SINGLE (2N) PROMOTER)  
L16 30 DUP REM L15 (12 DUPLICATES REMOVED)  
L17 0 S L6 AND (MULTIPLE (3N) GENE)  
L18 1 S L15 AND (CO-EXPRESSION OR COEXPRESSION)

FILE 'STNGUIDE' ENTERED AT 13:41:03 ON 24 JAN 2003

L19 2 S (CO-EXPRESSION OR EXPRESSION)

FILE 'MEDLINE, CAPLUS, BIOSIS, AGRICOLA' ENTERED AT 13:42:27 ON 24 JAN 2003

L20 1949864 S (CO-EXPRESSION OR EXPRESSION)  
L21 5160 S L20 AND (MULTIPLE (3N) PROTEIN)  
L22 2752 S L20 AND (MULTIPLE (1N) PROTEIN)  
L23 17 S L22 AND (SINGLE (1N) PROMOTER)  
L24 8 DUP REM L23 (9 DUPLICATES REMOVED)  
L25 68 S L9 AND (MULTIPLE (2N) (PROTEIN OR GENE OR POLYPEPTIDE))  
L26 31 DUP REM L25 (37 DUPLICATES REMOVED)  
L27 108570 S FUSION (1N) PROTEIN  
L28 0 S L27 (10N) HOW AND TO AND MAKE  
L29 1380 S L27 AND MAKE  
L30 94 S L27 AND L9  
L31 66 DUP REM L30 (28 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 14:06:43 ON 24 JAN 2003

=>

	Type	Hits	Search Text	DBs
1	BRS	27	"9100917"	USPAT; US-PGPUB; EPO; JPO; DERWENT;
2	BRS	6	"5811272"	USPAT; US-PGPUB; EPO; JPO; DERWENT;
3	BRS	399421	polyester	USPAT; US-PGPUB; EPO; JPO; DERWENT;
4	BRS	1	(4-hydroxybutyric or 4-hydroxybutyrate) near3 coenzyme	USPAT; US-PGPUB; EPO; JPO; DERWENT;
5	BRS	1	polyester and ((4-hydroxybutyric or 4-hydroxybutyrate) near3 coenzyme)	USPAT; US-PGPUB; EPO; JPO; DERWENT;
6	BRS	0	polyhydroxyalkanoic near1 synthase	USPAT; US-PGPUB; EPO; JPO; DERWENT;
7	BRS	0	hydroxybutyratec near1 synthase	USPAT; US-PGPUB; EPO; JPO; DERWENT;
8	BRS	5	hydroxybutyrate near1 synthase	USPAT; US-PGPUB; EPO; JPO; DERWENT;
9	BRS	0	(hydroxybutyrate near1 synthase) and (polyester and ((4-hydroxybutyric or 4-hydroxybutyrate) near3 coenzyme))	USPAT; US-PGPUB; EPO; JPO; DERWENT;
10	BRS	5	(hydroxybutyrate near1 synthase) and polyester	USPAT; US-PGPUB; EPO; JPO; DERWENT;
11	BRS	159	hydroxybutyrate near10 polyester	USPAT; US-PGPUB; EPO; JPO; DERWENT;
12	BRS	0	(hydroxybutyrate near10 polyester) and ((4-hydroxybutyric or 4-hydroxybutyrate) near3 coenzyme)	USPAT; US-PGPUB; EPO; JPO; DERWENT;
13	BRS	276	4-hydroxybutyric near1 acid	USPAT; US-PGPUB; EPO; JPO; DERWENT;
14	BRS	10	poly near1 (4-hydroxybutyric near1 acid)	USPAT; US-PGPUB; EPO; JPO; DERWENT;
15	BRS	8	"958367"	USPAT; US-PGPUB; EPO; JPO; DERWENT;
16	BRS	1	hein AND sohling	USPAT; US-PGPUB; EPO; JPO; DERWENT;

	Type	Hits	Search Text	DBs
17	BRS	9	"06225"	USPAT; US-PGPUB; EPO; JPO; DERWENT;
18	BRS	7	"9306225"	USPAT; US-PGPUB; EPO; JPO; DERWENT;
19	BRS	2	"9836078"	USPAT; US-PGPUB; EPO; JPO; DERWENT;
20	BRS	1126	XL1-blue	USPAT; US-PGPUB; EPO; JPO; DERWENT;
21	BRS	599	XL1-blue and (Escherichia near1 coli)	USPAT; US-PGPUB; EPO; JPO; DERWENT;
22	BRS	98	XL1-blue near3 (Escherichia near1 coli)	USPAT; US-PGPUB; EPO; JPO; DERWENT;
23	BRS	98	(XL1-blue near3 (Escherichia near1 coli)) and method	USPAT; US-PGPUB; EPO; JPO; DERWENT;
24	BRS	86	((XL1-blue near3 (Escherichia near1 coli)) and method) and production	USPAT; US-PGPUB; EPO; JPO; DERWENT;
25	IS&R	3	("5512468").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT;
26	BRS	0	((("5512468").PN.) and (("5707841").PN.) and xl1-blue	USPAT; US-PGPUB; EPO; JPO; DERWENT;
27	IS&R	0	("I3 and xl1-blue").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT;
28	IS&R	0	("I1 and xl1-blue").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT;
29	IS&R	0	("I8 and xl1-blue").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT;
30	IS&R	2	("5707841").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT;
31	BRS	248067	co-expression or expression	USPAT; US-PGPUB; EPO; JPO; DERWENT;
32	BRS	2910	(co-expression or expression) and (pha or polyhydroxyalkanoic)	USPAT; US-PGPUB; EPO; JPO; DERWENT;

	Type	Hits	Search Text	DBs
33	BRS	154	((co-expression or expression) and (pha or polyhydroxyalkanoic)) and polyester	USPAT; US-PGPUB; EPO; JPO; DERWENT;
34	BRS	653	((co-expression or expression) and (pha or polyhydroxyalkanoic)) and fatty	USPAT; US-PGPUB; EPO; JPO; DERWENT;
35	BRS	244	((co-expression or expression) and (pha or polyhydroxyalkanoic)) and fatty) and transferase	USPAT; US-PGPUB; EPO; JPO; DERWENT;
36	BRS	43	((co-expression or expression) and (pha or polyhydroxyalkanoic)) and fatty) and transferase) and polyester	USPAT; US-PGPUB; EPO; JPO; DERWENT;
37	BRS	68	((co-expression or expression) and (pha or polyhydroxyalkanoic)) and fatty) and polyester) and coA	USPAT; US-PGPUB; EPO; JPO; DERWENT;
38	BRS	92	((co-expression or expression) and (pha or polyhydroxyalkanoic)) and fatty) and polyester	USPAT; US-PGPUB; EPO; JPO; DERWENT;
39	BRS	801	((co-expression or expression) and (pha or polyhydroxyalkanoic)) and transferase	USPAT; US-PGPUB; EPO; JPO; DERWENT;
40	BRS	43	((co-expression or expression) and (pha or polyhydroxyalkanoic)) and transferase) and polyester) and Coa	USPAT; US-PGPUB; EPO; JPO; DERWENT;
41	BRS	59	((co-expression or expression) and (pha or polyhydroxyalkanoic)) and transferase) and polyester	USPAT; US-PGPUB; EPO; JPO; DERWENT;
42	BRS	668	Huisman	USPAT; US-PGPUB; EPO; JPO; DERWENT;
43	BRS	6	(Huisman and (pha or polyhydroxyalkanoate)) and 4-hydroxy	USPAT; US-PGPUB; EPO; JPO; DERWENT;
44	BRS	75	Huisman and (pha or polyhydroxyalkanoate)	USPAT; US-PGPUB; EPO; JPO; DERWENT;
45	BRS	24761	fusion near1 protein	USPAT; US-PGPUB; EPO; JPO; DERWENT;
46	BRS	1557	single near1 promoter	USPAT; US-PGPUB; EPO; JPO; DERWENT;
47	BRS	1073	(fusion near1 protein) and (single near1 promoter)	USPAT; US-PGPUB; EPO; JPO; DERWENT;
48	BRS	4	(fusion near1 protein) near10 (single near1 promoter)	USPAT; US-PGPUB; EPO; JPO; DERWENT;

	Type	Hits	Search Text	DBs
49	BRS	4303	recombinant near3 (fusion near1 protein)	USPAT; US-PGPUB; EPO; JPO; DERWENT;

26 ANSWER 19 OF 31 MEDLINE DUPLICATE 13

AN 1998298537 MEDLINE

DN 98298537 PubMed ID: 9634798

TI Expression of **multiple** eukaryotic **genes** from a **single promoter** in Nicotiana.

AU von Bodman S B; Domier L L; Farrand S K

CS Department of Plant Pathology, University of Illinois, Urbana 61801, USA..  
susanne.von.bodman@qms1.life.uiuc.edu

SO BIO/TECHNOLOGY, (1995 Jun) 13 (6) 587-91.  
Journal code: 8309273. ISSN: 0733-222X.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Biotechnology

EM 199807

ED Entered STN: 19980811  
Last Updated on STN: 19980811  
Entered Medline: 19980729

AB We engineered an expression unit composed of three eukaryotic genes driven by a **single** plant-active **promoter** and demonstrated functional expression in planta. The individual genes were linked as translational fusions to produce a polyprotein using spacer sequences encoding specific heptapeptide cleavage recognition sites for NIa protease of tobacco vein mottling virus (TVMV). The NIa gene itself was included as the second gene of the multi-gene unit. The first and third genes, obtained from the TR region of pTi15955, encoded enzymatic functions associated with the mannityl opine biosynthetic pathway. The mannityl opine conjugase gene (mas2) was the first unit of the construct and provided the native plant-active promoter and 5' untranslated regulatory sequence. The third gene (mas1), encoding the mannityl opine reductase, furnished the native 3' untranslated region. Cis-processing of the polyprotein by the NIa protease domain was demonstrated in vitro using rabbit reticulocyte lysate and wheat germ cell-free translation systems. Tobacco plant cells transformed with the multi-gene unit produced detectable levels of mannopine, mannopinic acid, and their biosynthetic intermediates, deoxyfructosyl-glutamate and deoxyfructosyl-glutamine. This indicates that the polygene construct results in a set of functional enzymatic activities that constitute a complete metabolic pathway.

L7 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 6  
AN 1994:599043 CAPLUS  
DN 121:199043  
TI Application of enzymically synthesized short-chain-length hydroxy fatty acid coenzyme A thioesters for assay of **polyhydroxyalkanoic acid** synthases  
AU Valentin, Henry E.; Steinbuechel, Alexander  
CS Inst. Mikrobiol., Georg-August-Univ. Goettingen, Goettingen, D-37077, Germany  
SO Applied Microbiology and Biotechnology (1994), 40(5), 699-709  
CODEN: AMBIDG; ISSN: 0175-7598  
DT Journal  
LA English  
AB Various hydroxyacyl CoA thioesters were synthesized from the corresponding hydroxyalkanoic acid (such as e.g. [3-14C]D-(-)-hydroxybutyric acid, [1-14C]D-lactic acid, [1-14C]L-lactic acid, etc.) and from acetyl-CoA employing the propionate **CoA transferase** of *Clostridium propionicum*. Preparative isolation of the thioesters on hydrophobic matrixes and anal. by HPLC are reported. These thioesters were subjected to a radiometric or a spectrometric assay of **polyhydroxyalkanoic acid (PHA)** synthase activity. The latter was based on the release of CoA from, for example D-(-)-3-hydroxybutyryl-CoA, which was detected spectroscopically at 412 nm by redn. of 5,5'-dithio(2-nitrobenzoic acid) and provided a convenient assay of poly(3-hydroxybutyrate) synthase. When [1-14C]acetyl-CoA was used as substrate in a **PHA** synthase assay employing crude exts. obtained from various wild-type strains, [1-14C]acetyl-CoA was used as a substrate at a rate that was only less than 10<sup>-4</sup> of the rate with [3-14C]D-(-)-3-hydroxybutyryl-CoA or was negligible. One exception was a recombinant strain of *Escherichia coli*, which overexpressed the **PHA** synthase complex of *Chromatium vinosum* and which used [1-14C]acetyl-CoA as substrate at a relatively high rate.